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REMARKS

Claims 1-6 and 9-19 are pending in the application. Claim 1 has been amended by the present amendment. The amendment is fully supported by the specification as originally filed (see, e.g., page 26, lines 16-24).

In the Final Office Action of 01/12/2005, claims 7 and 8 were objected to "for failing to further limit the subject matter of a previous claim." Claims 7 and 8 have been canceled without prejudice, thereby obviating the objection.

Applicants' claimed invention is directed to a pixel defect detector that includes a calculation section for obtaining output characteristics of a subject photoelectric transducer for **arbitrary** amounts of light incident thereupon (see claim 1, as amended). As described in the specification, the amount of light incident upon a solid-state imaging device can be varied using functions of a digital still camera, such as strobe (e.g., the flash), shutter speed and/or diaphragm (see specification at page 26, lines 16-24).

Thus, depending on the respective camera settings as well as the available ambient light, the amount of light incident on the photoelectric transducer can range from a high intensity level to a low intensity level, or any intensity level in between. In other words, a pixel defect detector according to the Applicants' invention can operate even when the amount of light incident upon the photoelectric transducer is **arbitrary**. This is advantageous, for example, to allow defect detection to occur regardless of the camera settings and/or the ambient light available at the time the image is taken.

Claims 1-3 and 7 were rejected under 35 USC 103(a) as being unpatentable over U.S. Patent 4,253,120 to Levine in view of U.S. Patent 6,396,539 to Heller et al. ("Heller"). Claim 5 was rejected under 35 USC 103(a) as being unpatentable over Levine in view of Heller, and further in view of U.S. Patent 6,184,529 to Contini. These rejections are respectfully traversed.

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On page 4 of the Final Office Action, it was admitted that Levine does not teach or suggest obtaining output characteristics of a pixel by applying varied amounts of incident light. However, the Examiner cited column 7, lines 58-61 of Heller for allegedly disclosing an imaging device that detects pixel defects, where "[d]efect detection involves analyzing the output when two different lighting conditions are present" (see Final Office Action at page 5, first paragraph).

Heller does not teach or suggest a pixel defect detector in which the amount of incident light required for pixel defect detection is arbitrary. Instead, Heller requires that the level of light be sufficient to saturate the pixels of the array.

In Heller, a sensor array of an integrated circuit imaging device is illuminated by a flat image, i.e., an image with no variation in light intensity or color. The image is selected so as to cause all pixels in the sensor array to become saturated after a predetermined period. A control unit analyzes the signals and determines if any of the received analog signals are not saturated, thereby indicating that a particular pixel is not operational (see, e.g., column 7, line 61 to column 8, line 20 of Heller). For example, a completely white image is used to detect pixels that output a zero value, and a completely black image is used to detect pixels that output a light detected signal.

Thus, the pixel defect detection system of Heller requires that the amount of light applied to the sensor array saturate all pixels in the array. Saturation requires the intensity of light incident on the sensor array to be above a first preset level or below a second present level. Such a requirement on the amount of light does not constitute an **arbitrary** amount of light, as recited in claim 1.

Therefore, even if Heller were somehow combined with Levine, the proposed combination would not teach or suggest the Applicants' claimed invention, for at least the reasons discussed above.

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Regarding the rejection of claim 5, the Contini reference does not remedy the deficiencies of Levine and/or Heller. Therefore, the proposed combination of Levine in view of Heller and further in view of Contini does not teach or suggest the Applicants' claimed invention.

It is believed the application is in condition for immediate allowance, which action is earnestly solicited.

Respectfully submitted,

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